1. A method of operating a computer aided design system in presumptive mode, comprising the steps of:

moving a selected graphic object relative to a graphic pointing symbol;

determining when the selected graphic object is within a predetermined proximity of an underlying graphic object;

manipulating the selected graphic object into a geometric relationship with the underlying graphic object according to predetermined geometric rules; and

dynamically updating the geometric relationship based on movement of the graphic pointing symbol while the graphic pointing symbol remains within the predetermined proximity of the underlying graphic object.

2. (Amended) The method of claim 1, wherein the predetermined proximity is a location tolerance before said manipulating step and converts to a larger rejection tolerance during said [maintaining] dynamically updating step.

3. The method of claim 1, wherein said manipulating step comprises the step of:

orientating the selected graphic object according to a tangential angle with respect to the underlying graphic object at a cling point.

4. The method of claim 1, wherein said manipulating step includes the step of:

positioning the selected graphic object at a predetermined offset relative to the underlying graphic object.

5. (Amended) The method of claim 4, wherein the underlying graphic object has two sides, during said [maintaining] dynamically updating step, further comprising the step of:

moving the selected graphic object to the opposite side of the underlying graphic object when the graphic pointing symbol is moved to the opposite side.

6. (Amended) The method of claim 5, wherein said [maintaining] dynamically updating step further comprises the step of:

mirroring the selected graphic object about the underlying graphic object when moved to the opposite side of the underlying graphic object.

7. (Amended) The method of claim 6, wherein said [maintaining] dynamically updating step further comprises the step of:

mirroring the selected graphic object about a perpendicular offset line when moved to the opposite side of the underlying graphic object.

8. (Amended) The method of claim 5, wherein said [maintaining] dynamically updating step further comprises the step of:

mirroring the selected graphic object about a perpendicular offset line when moved to the opposite side of the underlying graphic object.

9. The method of claim 1, after said manipulating step, further comprising the step of:

modifying the underlying graphic object according to the predetermined geometric rules.

10. The method of claim 9, wherein said modifying step comprises the step of:

dividing the underlying graphic object into two separate underlying graphic objects for inserting the selected graphic object therebetween.

11. The method of claim 10, wherein said modifying step further comprises the step of:

deleting a portion of the original underlying graphic object for inserting the selected graphic object.

12. The method of claim 1, wherein the selected graphic object includes at least one alignment vector, said manipulating step further comprising the step of:

aligning the selected graphic object with the underlying graphic object according to the alignment vector.

13. The method of claim 1, wherein the selected graphic object and the underlying graphic object each have an alignment vector, wherein said manipulating step comprises the step of:

aligning the selected graphic object with the underlying graphic object by aligning the alignment vectors.

14. The method of claim 1, wherein the selected graphic object includes a clip region, said manipulating step further comprising the step of:

partially deleting the underlying graphic object according to the clip region.

15. The method of claim 14, wherein the underlying graphic object comprises a plurality of graphic objects, said partially deleting step further comprising the step of:

partially deleting only selected ones of the plurality of graphic objects corresponding to ~~the clip~~ region.

16. (Amended) The method of claim 1, wherein said [maintaining] dynamically updating step further comprises the steps of:

clinging the selected graphic object to an initial cling point; and

rotating the selected graphic object about the initial cling point corresponding to movement of the graphic pointing symbol.

17. The method of claim 1, further comprising the step of:

unclinging the selected graphic object from the underlying graphic object to move with the graphic pointing symbol when the graphic pointing symbol is moved a greater distance than the predetermined proximity from the underlying graphic object.

18. (Amended) The method of claim 1, wherein said [maintaining] dynamically updating step includes the step of:

moving the selected graphic object relative to a sliding cling point along the underlying graphic object where the cling point moves relative to the graphic pointing symbol as the graphic pointing symbol is moved within the predetermined proximity of the underlying graphic object.

19. (Amended) The method of claim 18, wherein said [maintaining] dynamically updating step further comprises the step of:

interactively modifying the underlying graphic object according to the predetermined rules and relative to the sliding cling point as the graphic pointing symbol is moved.

20. (Amended) The method of claim 18, wherein the underlying graphic object includes a primary vector and a secondary vector, the selected graphic object having a first alignment vector and a second alignment vector, wherein said manipulating and [maintaining] dynamically updating steps further comprise the steps of:

aligning the selected graphic object with the primary vector according to the first alignment vector when the first alignment vector is within a predetermined proximity of the primary vector; and

aligning the selected graphic object with the secondary vector according to the second alignment vector when the second alignment vector is within a predetermined proximity of the secondary vector.

21. A method of operating a computer aided design system, comprising the steps of:

providing at least one graphic object to be selected for insertion into a graphic design;

displaying and moving a selected graphic object with a graphic cursor moved within the graphic design;

when the selected graphic object is within a predetermined proximity with respect to one or more underlying graphic objects, automatically manipulating the object into a geometric relationship with the underlying graphic object; and

dynamically updating the geometric relationship based on movement of the graphic cursor while the graphic cursor remains within the predetermined proximity of the underlying graphic object.

22. The method of claim 21, wherein said manipulating step comprises the steps of:

orienting the selected graphic object relative to a cling point along the underlying graphic object; and

positioning the selected graphic object at a predetermined offset relative to the cling point.

23. The method of claim 22, further comprising the step of:

continually re-orienting and re-positioning the selected graphic object relative to a sliding cling point which moves relative to the graphic cursor as it is moved within the ~~predetermined proximity~~.

24. (Amended) A presumptive mode computer aided design system for interactively manipulating and displaying a selected object according to predefined geometric relationships, comprising:

a display device for displaying a graphic environment;

memory for storing data, including:

a data base defining geometric relationships among graphic objects;

a plurality of graphic object files, each defining a corresponding graphic object and associated symbol for display in said graphic environment; and

a design file for incorporating a plurality of underlying graphic objects according to said geometric relationships;

a pointing device for receiving input from an operator; and

a processor coupled to said memory, said display device and said pointing device for controlling said graphic environment;

wherein the operator selects an object for insertion into said design file and manipulates a graphic cursor in proximity with one of said underlying graphic objects displayed in said geographic environment, wherein said processor moves said selected object with said graphic cursor and then manipulates said graphic object and said design file into a geometric relationship when said selected object is within proximity with said one of said underlying graphic objects, and wherein said processor dynamically updates said geometric relationship based on movement of said graphic cursor while said graphic cursor is within proximity of said underlying graphic objects.

25. (New) A computer aided design system, comprising:

a computer;

means, performed by the computer, for moving a selected graphic object relative to a graphic pointing symbol, for determining when the selected graphic object is within a predetermined proximity of an underlying graphic object, for manipulating the selected graphic object into a geometric relationship with the underlying graphic object according to predetermined geometric rules, and for dynamically updating the geometric relationship based on movement of the graphic pointing symbol while the graphic pointing symbol remains within the predetermined proximity of the underlying graphic object.

26. (New) The system of claim 25, wherein the predetermined proximity is a location tolerance before said means for manipulating and converts to a larger rejection tolerance during said means for dynamically updating.

27. (New) The system of claim 25, wherein said means for manipulating comprises:

means for orientating the selected graphic object according to a tangential angle with respect to the underlying graphic object at a cling point.

28. (New) The system of claim 25, wherein said means for manipulating includes:

means for positioning the selected graphic object at a predetermined offset relative to the underlying graphic object.

29. (New) The system of claim 28, wherein the underlying graphic object has two sides, during said means for dynamically updating, further comprising:

means for moving the selected graphic object to the opposite side of the underlying graphic object when the graphic pointing symbol is moved to the opposite side.

30. (New) The system of claim 29, wherein said means for dynamically updating further comprises:

means for mirroring the selected graphic object about the underlying graphic object when moved to the opposite side of the underlying graphic object.

31. (New) The system of claim 30, wherein said means for dynamically updating further comprises:

means for mirroring the selected graphic object about a perpendicular offset line when moved to the opposite side of the underlying graphic object.

32. (New) The system of claim 29, wherein said means for dynamically updating further comprises:

means for mirroring the selected graphic object about a perpendicular offset line when moved to the opposite side of the underlying graphic object.

33. (New) The system of claim 25, after said means for manipulating, further comprising:

means for modifying the underlying graphic object according to the predetermined geometric rules.

34. (New) The system of claim 33, wherein said means for modifying comprises:

means for dividing the underlying graphic object into two separate underlying graphic objects for inserting the selected graphic object therebetween.

35. (New) The system of claim 34, wherein said means for modifying further comprises:

means for deleting a portion of the original underlying graphic object for inserting the selected graphic object.

36. (New) The system of claim 25, wherein the selected graphic object includes at least one alignment vector, said means for manipulating further comprising:

means for aligning the selected graphic object with the underlying graphic object according to the alignment vector.

37. (New) The system of claim 25, wherein the selected graphic object and the underlying graphic object each have an alignment vector, wherein said means for manipulating comprises:

means for aligning the selected graphic object with the underlying graphic object by aligning the alignment vectors.

38. (New) The system of claim 25, wherein the selected graphic object includes a clip region, said means for manipulating further comprising:

means for partially deleting the underlying graphic object according to the clip region.

39. (New) The system of claim 38, wherein the underlying graphic object comprises a plurality of graphic objects, said means for partially deleting further comprising:

means for partially deleting only selected ones of the plurality of graphic objects corresponding to the clip region.

40. (New) The system of claim 25, wherein said means for dynamically updating further comprises:

means for clinging the selected graphic object to an initial cling point; and

means for rotating the selected graphic object about the initial cling point corresponding to movement of the graphic pointing symbol.

41. (New) The system of claim 25, further comprising:

means for unclinging the selected graphic object from the underlying graphic object to move with the graphic pointing symbol when the graphic pointing symbol is moved a greater distance than the predetermined proximity from the underlying graphic object.

42. (New) The system of claim 25, wherein said means for dynamically updating includes:

means for moving the selected graphic object relative to a sliding cling point along the underlying graphic object where the cling point moves relative to the graphic pointing symbol as the graphic pointing symbol is moved within the predetermined proximity of the underlying graphic object.

43. (New) The system of claim 42, wherein said means for dynamically updating further comprises:

means for interactively modifying the underlying graphic object according to the predetermined rules and relative to the sliding cling point as the graphic pointing symbol is moved.

44. (New) The system of claim 25, wherein the underlying graphic object includes a primary vector and a secondary vector, the selected graphic object having a first alignment vector and a second alignment vector, wherein said means for manipulating and means for dynamically updating further comprise:

means for aligning the selected graphic object with the primary vector according to the first alignment vector when the first alignment vector is within a predetermined proximity of the primary vector; and

means for aligning the selected graphic object with the secondary vector according to the second alignment vector when the second alignment vector is within a predetermined proximity of the secondary vector.

45. (New) A computer aided design system, comprising:

a computer;

means, performed by the computer, for providing at least one graphic object to be selected for insertion into a graphic design and for displaying and moving a selected graphic object with a graphic cursor moved within the graphic design;

means, performed by the computer, for automatically manipulating the object into a geometric relationship with the underlying graphic object when the selected graphic object is within a predetermined proximity with respect to one or more underlying graphic objects; and

means, performed by the computer, for dynamically updating the geometric relationship based on movement of the graphic cursor while the graphic cursor remains within the predetermined proximity of the underlying graphic object.

46. (New) The system of claim 45, wherein said means for manipulating comprises:

means for orienting the selected graphic object relative to a cling point along the underlying graphic object; and

means for positioning the selected graphic object at a predetermined offset relative to the cling point.

47. (New) The system of claim 46, further comprising:

means for continually re-orienting and re-positioning the selected graphic object relative to a sliding cling point which moves relative to the graphic cursor as it is moved within the predetermined proximity.

48. (New) A method of operating a computer-aided design system, comprising:

(a) displaying a first graphic object on a computer; and

(b) displaying at least one point of interest on the computer when a pointing symbol is within a predetermined proximity of the first graphic object.

49. (New) The method of claim 48, wherein a position of the pointing symbol is controlled by an input device coupled to the computer.

50. (New) The method of claim 48, wherein the points of interest are identified by predefined rules.

51. (New) The method of claim 50, wherein the predefined rules limit selection of the first graphic object.

52. (New) The method of claim 50, wherein the predefined rules perform one or more geometric computations selected from a group comprising tangent, offset, parallel, alignment, end point, major vector, divided segment, extended segment, and intersection computations.

53. (New) The method of claim 48, further comprising displaying a second graphic object and joining the first and second graphic objects when the pointing symbol is moved to within a predetermined location tolerance of the first graphic object.

54. (New) The method of claim 53, wherein the predetermined location tolerance identifies a minimum perpendicular distance which determines when the second graphic object is close enough to the first graphic object to establish an association therebetween.

55. (New) The method of claim 53, wherein the second graphic object is joined to the first graphic object when a designated origin point of the second graphic object moves to within the predetermined location tolerance with respect to the first graphic object.

56. (New) The method of claim 53, further comprising separating the first and second graphic objects when the pointing symbol is moved to beyond a predetermined rejection tolerance of the first graphic object.

57. (New) The method of claim 53, wherein the joining step comprises joining the first and second graphic objects at one or more of the points of interest.

58. (New) The method of claim 53, wherein the first and second graphic objects are joined according to one or more characteristics selected from a group comprising a predefined offset, orientation, and rotation.

59. (New) The method of claim 53, further comprising dynamically updating a relationship between the first and second graphic as the pointing symbol is moved.

60. (New) The method of claim 59, wherein the dynamically updating step comprises repositioning the second graphic object relative to the first graphic object as the pointing symbol is moved.

61. (New) The method of claim 48, wherein the points of interest are cling points.

62. (New) The method of claim 48, further comprising displaying a second graphic object and clinging the second graphic object to the first graphic object according to at least one predefined cling characteristic.

63. (New) The method of claim 62, wherein the cling characteristic comprises at least one characteristic selected from a group comprising:

joining the second graphic object to the first graphic object via a shortest distance where the origin of the second graphic object aligns and is coincident with a closest point of interest on the first graphic object,

sliding the second graphic object in alignment with the first graphic object as the pointing symbol is moved,

rotating the second graphic object about at least one of the points of interest on the first graphic object by manipulating the pointing symbol around the point,

positioning the second graphic object at an opposite side of the first graphic object when the pointing symbol traverses from one side to another of the first graphic object, and

positioning the second graphic object at a 180-degree rotation of the first graphic object at a specified perpendicular offset in a direction of the pointing symbol.

64. (New) The method of claim 63, further comprising unclinging the second graphic object from the first graphic object as the pointing symbol is moved a distance greater than a predetermined rejection tolerance away from the first graphic object.

65. (New) A computer-aided design system, comprising:

(a) a computer; and

(b) means, performed by the computer, for displaying a first graphic object on a computer and for displaying at least one point of interest on the computer when a pointing symbol is within a predetermined proximity of the first graphic object.

66. (New) The method of claim 65, wherein a position of the pointing symbol is controlled by an input device coupled to the computer.

67. (New) The method of claim 65, wherein the points of interest are identified by predefined rules.

68. (New) The method of claim 67, wherein the predefined rules limit selection of the first graphic object.

69. (New) The method of claim 67, wherein the predefined rules perform one or more geometric computations selected from a group comprising tangent, offset, parallel, alignment, end point, ~~major vector, divided segment, extended segment, and intersection computations.~~

70. (New) The method of claim 65, further comprising displaying a second graphic object and joining the first and second graphic objects when the pointing symbol is moved to within a predetermined location tolerance of the first graphic object.

71. (New) The method of claim 70, wherein the predetermined location tolerance identifies a minimum perpendicular distance which determines when the second graphic object is close enough to the first graphic object to establish an association therebetween.

72. (New) The method of claim 70, wherein the second graphic object is joined to the first graphic object when a designated origin point of the second graphic object moves to within the predetermined location tolerance with respect to the first graphic object.

73. (New) The method of claim 70, further comprising separating the first and second graphic objects when the pointing symbol is moved to beyond a predetermined rejection tolerance of the first graphic object.

74. (New) The method of claim 70, wherein the joining step comprises joining the first and second graphic objects at one or more of the points of interest.

75. (New) The method of claim 70, wherein the first and second graphic objects are joined according to one or more characteristics selected from a group comprising a predefined offset, orientation, and rotation.

76. (New) The method of claim 70, further comprising dynamically updating a relationship between the first and second graphic as the pointing symbol is moved.

77. (New) The method of claim 76, wherein the dynamically updating step comprises repositioning the second graphic object relative to the first graphic object as the pointing symbol is moved.

78. (New) The method of claim 65, wherein the points of interest are cling points.

79. (New) The method of claim 65, further comprising displaying a second graphic object and clinging the second graphic object to the first graphic object according to at least one predefined cling characteristic.